5

10

15



Abstract of the Disclosure

A method and apparatus for reducing noise in an image sequence is provided. Images in the image sequence are recursively filtered on an area-by-area or, for example, pixel-by-pixel, basis. A pixel from an image is compared to a similarly located pixel from a previous image. A difference between one or more parameters of the pixels is determined. One or, preferably, two thresholds are used to classify three types of differences. Depending on the classification, the two pixels are blended together according to their parameters in varying amounts. Relatively small differences indicate a large fraction of the previous pixel to be combined with a small fraction of the current pixel. This substantially reduces the effects of random noise, which tends to cause relatively small, transient variations in the pixels of each image of the image sequence. Relatively large differences indicate the use of 100% of the current pixel without combining any of the previous pixel. Intermediate differences indicate smoothly transitioning from combining a large fraction of the previous pixel to combining none of the previous pixel depending on the differences relative to the thresholds.